Lloydspharmacy

ADVANCED

Blood Pressure Lowering System

User Manual

Model LBPL1

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Introduction

Thank you for purchasing the Lloydspharmacy Blood Pressure Lowering System (Model LBPL1).

1 in 3 people in the UK suffer with high blood pressure, that's over 16 million people! This can be caused by smoking, being over weight, excess alcohol consumption, diet or lack of exercise; you can also be more genetically prone to high blood pressure. Most people with high blood pressure don't have any symptoms; therefore it is essential to check it regularly.

High blood pressure is generally caused by the blood vessels tightening up and narrowing; this then causes the heart to pump harder. If left untreated, it increases the risk of cardiovascular disease, heart attacks and strokes.

The Blood Pressure Lowering System can be used as part of your overall health program for managing your blood pressure, as recommended by your doctor. The Lloydspharmacy Blood Pressure Lowering System can be safely used in conjunction with medication and lifestyle changes such as diet and exercise.

IMPORTANT: PLEASE KEEP THIS USER MANUAL FOR FURTHER REFERENCE

Introduction

For centuries, yoga and meditation have used breathing techniques to aid relaxation. In recent years, modern science has identified that certain breathing exercises can have therapeutic benefits in helping to lower blood pressure. However, it is not so easy to achieve these exercises on your own without training and individual coaching. The Lloydspharmacy Blood Pressure Lowering System has been designed to help you with these exercises so you can benefit from the therapeutic power of breathing.

The body has a natural tendency to follow musical rhythms and these are used in the Lloydspharmacy Blood Pressure Lowering System.

Introduction

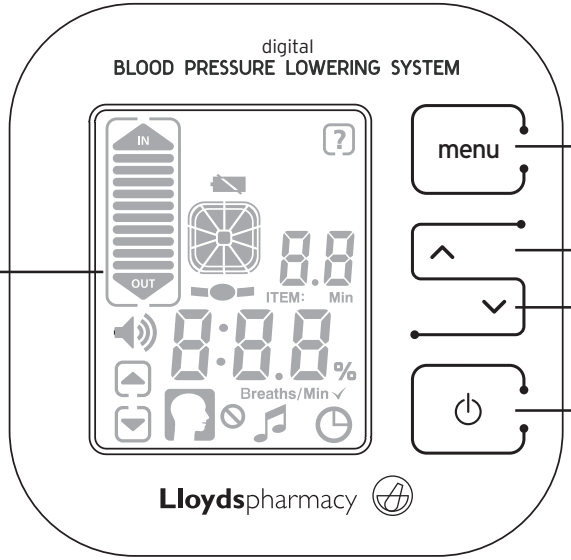
The Lloydspharmacy Blood Pressure Lowering System measures your breathing pattern using a sensor in the chest strap and it plays music to match your breathing comprising 2 distinct tones; an inhale tone and an exhale tone. It then slows these inhale and exhale tones by 1 breath per minute every 22 seconds. By breathing in and out in time with these tones, the Lloydspharmacy Blood Pressure Lowering System guides you to the therapeutic breathing zone – less than 10 breaths per minute.

Your blood pressure begins to reduce as the muscles surrounding your small blood vessels dilate and relax.

1. Sit somewhere comfortable and quiet where you are unlikely to be disturbed.
2. The ideal breathing rate is under 10 breaths per minute. However you may not reach this rate the first time. Like any exercise it may need more than one attempt.
3. Your aim is to achieve at least 10 minutes of breathing at less than 10 breaths per minute per session. Ideally you should try to achieve one full session per day; but at least 40 minutes breathing at this rate per week.
4. If you accumulate more sessions this can be helpful.
5. If you follow this program you can expect to see positive results in 3- 4 weeks. However, please be patient , as with all exercise programs, results will vary by individual and are also dependent upon other lifestyle factors.

N.B. The Lloydspharmacy Blood Pressure Lowering System can be used as part of any overall program to manage your blood pressure. Please don't change any medication without consulting your doctor.

Parts



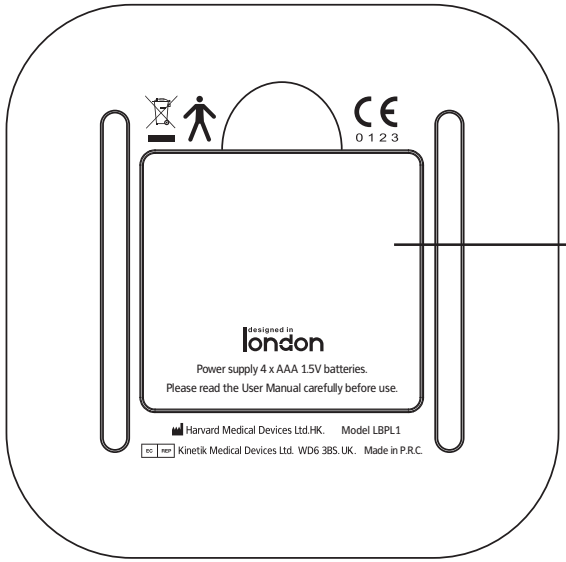
LCD screen

Menu

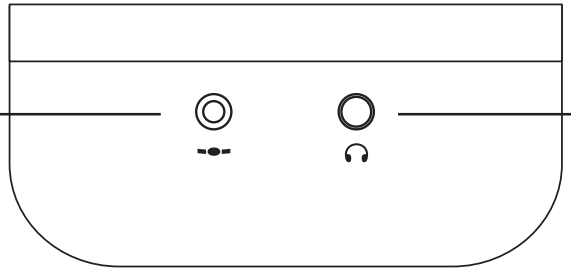
Up

Down

ON/OFF button

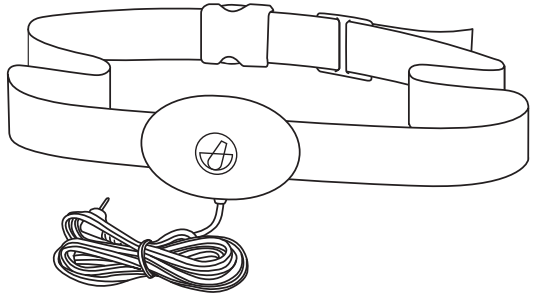

CE
0123
designed in
london
Power supply 4 x AAA 1.5V batteries.
Please read the User Manual carefully before use.
Harvard Medical Devices Ltd.HK. Model LBPL1
Kinetik Medical Devices Ltd. WD6 3BS. UK. Made in P.R.C.

Battery cover

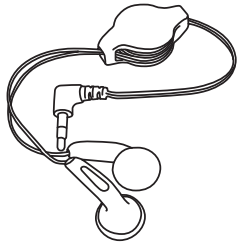


Sensor belt socket

Earphones socket

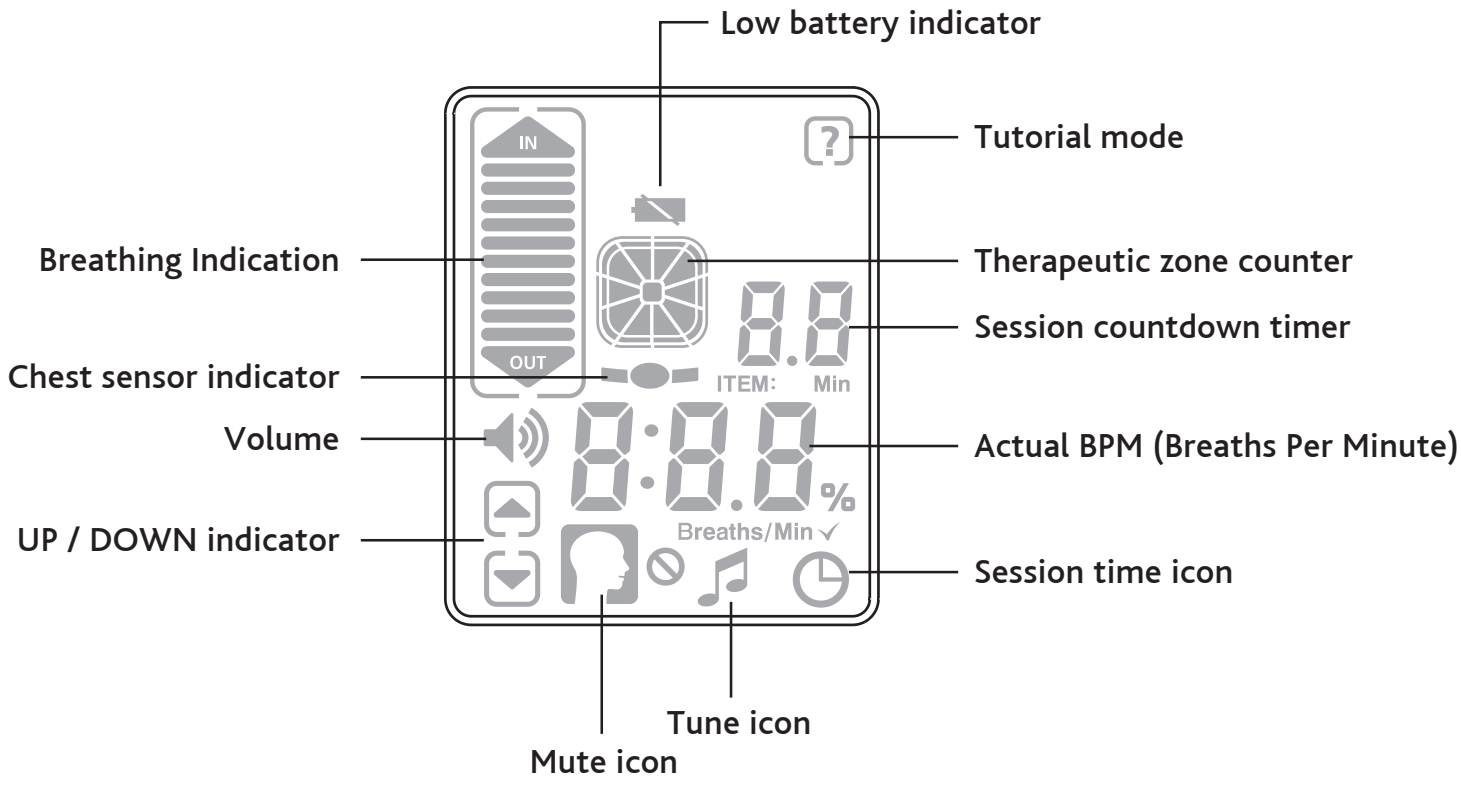


Breathing sensor belt



Earphones

Parts


Low battery indicator
Tutorial mode
Breathing Indication
Therapeutic zone counter
Session countdown timer
Chest sensor indicator
Volume
Actual BPM (Breaths Per Minute)
UP / DOWN indicator
Session time icon
Tune icon
Mute icon
IN
OUT
ITEM:
Min
Breaths/Min

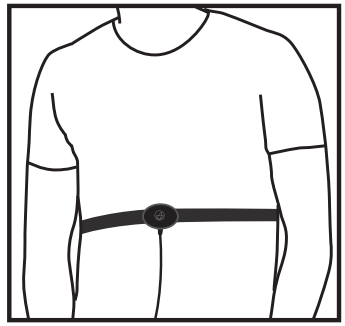
General Warnings and Safety

Warnings:
This device is intended for use as a relaxation treatment for the reduction of blood pressure by leading the user through guided and monitored breathing exercises. The device is indicated for use only as an additional treatment for high blood pressure together with medication and lifestyle changes such as diet and exercise.

- This device is designed for adults and should never be used on infants or young children. Consult your doctor or other healthcare professionals before use on older children.
- Do not use this device without consulting your doctor if you suffer or have suffered in the past from: active ischemic heart disease/unstable angina, severe congestive heart failure, chronic arterial fibrillation, stroke resulting in permanent impairment, chronic renal failure, severe asthma, chronic obstructive pulmonary disease (COPD) like chronic bronchitis and emphysema, major organ failure or sleep paralysis, have a pacemaker or if you are pregnant.
- Do not use the device when you need to be alert or to concentrate, or when using heavy equipment.
- Do not use device while driving.
- If you experience any side effects or if you feel any change in your general health or mood, immediately discontinue use of your device, and contact your Lloydspharmacy pharmacist.

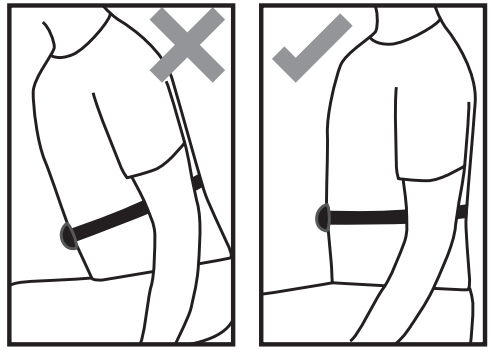
Wearing the Chest Sensor Belt and Earphones

1. **Putting the breathing sensor belt on**
   The belt should be wrapped around your upper abdomen, halfway between your navel and chest. Attaching the belt in front, as illustrated, will be more convenient. The flat surface of the breathing sensor belt is to be placed against your body and the breathing sensor cable should hang down. The breathing sensor belt should not be on too tightly, slide the sensor slightly to the left and right to ensure that it can move freely. Always wear the sensor over a shirt, never against your bare skin. Insert the breathing sensor plug into the smaller socket which you will find on the device.



2. **Wearing the earphones**
   Insert the earphones plug into the socket which can be found next to the sensor plug.

3. **Posture / seating position**
   It is important to make sure that your breathing is not being restricted in any way. Loosen restrictive clothing (tight trousers, belt, etc) and place the device in a comfortable position such as on your lap or a nearby table. It is important to avoid leaning forward which may limit the breathing movement of the abdomen or chest.



Tutorial

On first use (or after the batteries are replaced) the Blood Pressure Lowering System will automatically start in tutorial mode. This mode talks you through each stage of use. Note the [?] icon will be shown on the LCD display while in tutorial mode. You can adjust the volume at any time by pressing the ^ and v buttons. Pressing either the menu button or the ⏻ button will cancel the tutorial mode. The tutorial mode can be restarted by pressing and holding the menu button (when the unit is on) or by pressing and holding the ⏻ button (when the unit is off).

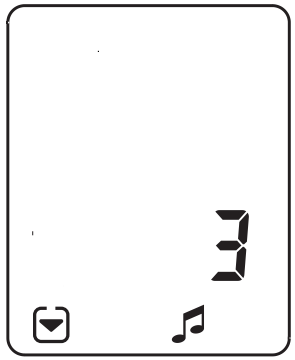
Using the Blood Pressure Lowering System

Your Blood Pressure Lowering System can be adjusted based on your preferences. If required, you can change the following settings:

- Music selection
- Breathing indication arrow
- Voice instructions
- Session duration

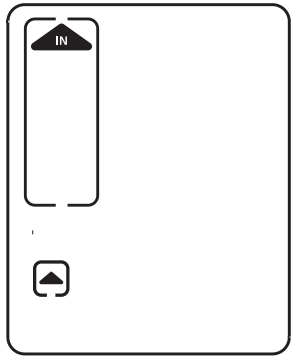
All of the above settings are listed accordingly in the order they appear when the MENU button is pressed.

Using the Blood Pressure Lowering System



• **Music Selection**

To select a different tune, press the MENU button once. Then press the UP or DOWN buttons to select your preferred tune. The tune icon and the selected tune number will appear on the screen. You have 3 tunes to choose from.



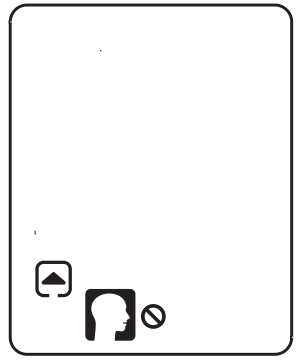
• **Breathing Indication Arrow**

The breathing indication arrows show when to breathe in and when to breathe out. By default these are set to on, but can be switched off if you find them to be a distraction. To turn the breathing indication arrows on or off, press the MENU button twice. Then, press the UP button to turn it on and the DOWN button to turn it off. Your display will change accordingly.

Using the Blood Pressure Lowering System

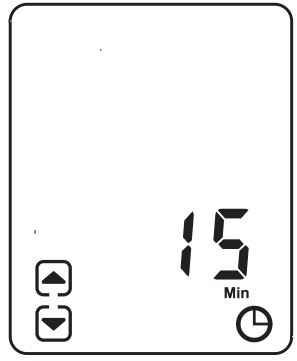
• Voice Instructions

During the session, voice instructions and warnings will be spoken. However, if they become a distraction, they can be muted. To turn the voice instructions on or off, press the MENU button three times. Then press the UP button to turn it on or the DOWN button to mute. Your display will change accordingly.



• Session Duration

The Blood Pressure Lowering System default session is set at 20 minutes.
To change the default session duration, press the MENU button four times. Then press the UP or DOWN buttons to increase/decrease the time. The time changes in increments of 5 minutes. Sessions can range between 10 to 60 minutes.



Using the Blood Pressure Lowering System

To use the Blood Pressure Lowering System please follow the instructions below:

1. **The Blood Pressure Lowing System begins by measuring your breathing rate and pattern. During this phase, background music will play and a figure showing your breathing movements will appear on the screen. The figure fills up as you breathe in and empties as you breathe out. You should relax and breathe while the Blood Pressure Lowing System measures your breathing rate and pattern. Once it has successfully measured your current breaths per minute (breaths /min), the result will be displayed on the screen. This should take no longer than 2 minutes.**

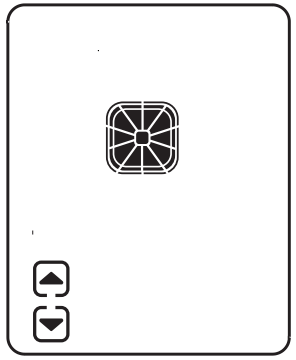
2. **The Blood Pressure Lowering System will select the correct tune and tempo based on your breathing rate. Listen to the tune and 'breathe in' at the high tone signal and 'breathe out' at the low tone signal. Change your breathing patterns with the tones, which slow down gradually. For the first minute, voice instructions will indicate when to 'breathe in' and 'breathe out'.**

3. **If you do not follow the breathing tones you will be notified with a voice prompt and additional voice instructions.**

Using the Blood Pressure Lowering System

3. The therapeutic breathing zone will be reached when your breathing rate is below 10 breaths per minute. The Therapeutic Zone Counter will appear on the LCD screen when this rate has been reached.

   One segment of the Therapeutic Zone Counter represents one minute within the optimum breathing zone. When all the segments have appeared, you have successfully spent 10 minutes on the optimum breathing zone. For every minute after this a ring will appear in the outside of the Therapeutic Zone Counter. For best results, ensure that you breathe within the optimum breathing zone for at least 40 minutes per week.



Recommendations for Best Use

In order to get the maximum benefit from using your Blood Pressure Lowering System please try to adhere to the advice detailed below:

Please ensure that you position yourself comfortably before the beginning of each session. It is important to avoid talking or body movement, other than breathing during the session as this could interfere with the breathing sensor and therefore the ability of the device to count your breaths accurately.

Breathing Tips

Effortless breathing throughout each session is the key to effectively relaxing muscles around the arteries allowing them to dilate thereby lowering blood pressure. This is best achieved through slow inhalation through the nose and then a slow exhalation through the mouth, this should be done in time to either the music, the voice (when activated) or icon directions on the device display. These visual guides are there to help you to develop an effortless breathing rhythm.

Recommendations for Best Use

When in a breathing session you should try to avoid the following:

- Holding your breath whilst trying to follow the guides
- Breathing too deeply
- Implementing new breathing techniques
- Falling asleep

For Positive Results

For positive results you will need to accumulate a minimum of 40 minutes per week in the therapeutic breathing zone, this should be sufficient for you to achieve a reduction in your blood pressure. Achieving more than 40 minutes per week will improve your chances of reducing your Blood Pressure even further.

Blood Pressure Record Table

Requires Lloydspharmacy Blood Pressure Monitor - Sold separately

Please log the date, time and your SYS (Systolic) and DIA (Diastolic) blood pressure levels. We recommend you share this information with your Doctor.

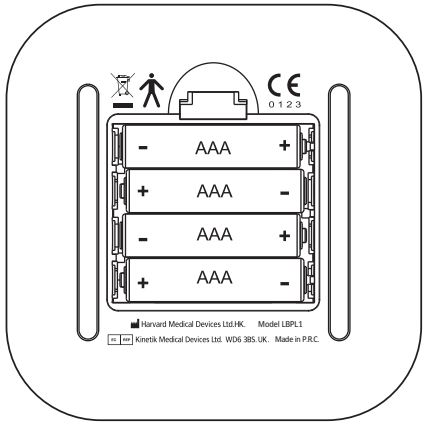
Name:					
Date	**Time**	**SYS (Systolic)**	**DIA (Diastolic)**	**Pulse Rate**	**Comments**

Battery Information

Set up

- **Install the batteries**

1. Open the battery cover at the back of the unit.
2. Insert 4 x AAA size batteries (not included) observing the correct polarity as shown on the inside of the battery compartment.
3. Replace the battery cover.



- Dispose of batteries safely according to the battery manufacturer's instructions
- Remove the batteries if the product will not be used for a long period of time
- Do not mix old and new batteries or different types of batteries
- WARNING: If batteries leak and come into contact with the skin or eyes, wash immediately with copious amounts of water
- Keep batteries away from infants and young children

Specifications

Model number:	LBPL1
Product name:	Blood Pressure Lowering System
Maximum audio output:	10mW with 16 Ohm Ear buds
Device display respiration rate:	range of 2-42 BPM but guides between 9.5-30 BPM
Operating Temperature/Humidity:	5°C to 40°C / 20% to 85%
Storage and transport Temperature/Humidity:	-20°C to 55°C / ≤85%
Battery:	4 x AAA batteries (not included)
Life of Battery:	two months, with regular use of 10 minutes per day
Size:	98mm × 98mm × 46mm
Weight:	125g Approx (without batteries)

Troubleshooting

Problem	Cause	Solution
The sensor fails to recognise your breathing pattern	The sensor is not positioned correctly	Refer to sections 'Wearing the Chest Sensor Belt and Earphones' and 'Tutorial' in this user manual (page 8 & 9)
	Breathing is too erratic	Breathe normally in a relaxed manner
The device repeats the message "It seems that you are not following the tones"	Breathing is not in time with the guiding tones	If not already activated switch on the guided breathing arrows so that they appear on the display
The LCD display does not appear when the device is switched on	Batteries have been inserted incorrectly	Insert batteries observing the correct polarity
	Batteries need to be replaced	Replace batteries

Troubleshooting

Problem	Cause	Solution
Music is not heard through the earphones	Volume is too low	Press the up button to increase the volume (page 9)
	Earphones are not correctly inserted into the device	Check that the earphones are correctly connected to the device
	The device automatically switched off because the session had finished	Restart to begin a new session
Static interference is heard through the earphones	Earphones are not correctly inserted into the device	Check that the earphones are correctly connected to the device
	Interference may be caused by another Electronic Communication device in your vicinity (within 2 metres) e.g. mobile phone	Whilst conducting a session please remove all Electronic Communication Devices from your vicinity

Frequently Asked Questions

Q. What is the main purpose of the Blood Pressure Lowering System?
A. It is designed as an aid to lowering and managing blood pressure.

Q. How does it lower my blood pressure?
A. By guiding you into the therapeutic breathing zone.

Q. What is the therapeutic breathing zone?
A. It is breathing at a rate of just less than 10 breaths per minute.

Q. Why is less than 10 breaths per minute a good breathing rate?
A. Because at this rate the muscles around the arteries begin to relax. When they relax the arteries dilate and this reduces blood pressure.

Q. How do I get to therapeutic breathing?
A. By following the guiding tones.

Q. What is the tutorial stage?
A. On first use the unit plays a tutorial. The guiding voice will lead you through what the unit will do and what you need to do too.

Frequently Asked Questions

Q. How does it recognise my breathing pattern?
A. You wear a chest strap with a sensor. The sensor detects movement in your chest and recognises a breath in and a breath out. You also wear earphones through which you be able to hear music and the guiding voice.

Q. What if the device can't detect my breathing?
A. This could be due to clothing or the positioning of the chest strap. Restrictive clothing may disrupt the signal and should be removed. Check that the positioning of the chest strap is correct. Sit comfortably on a chair, lean back and place your right hand on the right side of your chest. Place your left hand on the upper abdomen, above the navel. Take a few breaths. Feel which hand moves first when you start to inhale and exhale. The sensor position is determined by which hand moves first. Place the sensor accordingly.

Q. Is there a way of knowing if the sensor is detecting my breathing?
A. The breathing indication fills up with bars on a breath in and empties on a breath out.

Q. Do I need to totally fill the moving bars on a breath in and empty the bars on a breath out?
A. No. The system will not need you to do this.

Frequently Asked Questions

Q. How does a session begin?
A. First of all the system needs to measure your breathing pattern. At the start of the session the unit identifies your breaths per minute and the music, voice and LCD arrow guides will all adjust to begin at your breathing rate. e.g. if you are breathing at 17 breaths per minute the system will start at 17 breaths per minute.

Q. What happens once the system has identified my breathing pattern?
A. The guiding voice will ask you to breath in time with the music. To help you begin the guiding voice will talk you through your first breaths, when the voice has stopped the breathing indicator on the LCD screen will show you when to breathe in and out. So there are 2 audio prompts and 1 visual prompt to assist you.

Q. How does the system take me from my breathing pattern to therapeutic breathing?
A. The system will reduce its speed by 1 breath per 22 seconds until you reach just less than 10 breaths per minute (Between 9.5 and 9.9).

Q. What if I don't follow the reduction of breaths per minute?
A. The system is intelligent and recognises if you are not following the journey. The guiding voice will prompt you to follow the tones.

Q. How do I know when I have reached therapeutic breathing?
A. Once you have managed to reach therapeutic breathing the voice will tell you and a circle will appear on the LCD screen.

Frequently Asked Questions

Q. What happens when I have reached therapeutic breathing?
A. A circle appears when you have reached therapeutic breathing. The circle shown on the LCD screen starts empty and fills with segments, each of which equals one minute. One segment appears per minute you spend in the therapeutic breathing zone.

Q. How many segments should I fill in a session?
A. The aim is to fill the circle with all 10 segments in a session.

Q. What if my breaths per minute rises above the therapeutic breathing level?
A. The guiding voice will inform you and your breaths per minute will appear on the screen. The system will then guide you back to therapeutic breathing.

Q. Will I lose the segments I have already accumulated if I rise above therapeutic breathing and then return to it?
A. No. The system will remember the segments you have accumulated in the session whilst you remain in the session.

Q. Will accumulated segments be stored for the next time I use the system.
A. No. Accumulated segments are only retained whist the system is switched on.

Q. How many minute segments should I accumulate each day?
A. The ideal is 10 segments a day. The base requirement is to achieve 40 segments per week.

Frequently Asked Questions

Q. Are there any settings I can adjust?
A. Yes. You can set the volume, you can select from 3 tunes and you can adjust the session time from 10 to 60 minutes. You can also choose to switch off the LCD arrows and the voice.

Q. How do I access these user controlled settings?
A. By pressing the Memory button – but only whilst you are in a session.

Q. I pressed the Menu button but nothing happened – why?
A. You must be in a session to access the Menu button. Otherwise the only user adjustable setting is volume up and down.

Q. When can I expect to see results?
A. Over the next few weeks' blood pressure should start to reduce.

Q. If my blood pressure starts to reduce can I stop taking my medicines?
A. No. You should not stop any course of medication without consultation with your doctor.

Maintenance and Cautions

1. Do not drop this device or subject it to strong impact.
2. To avoid environmental pollution, please do not throw away the scrapped batteries and the appliance or its components.
3. Batteries should be removed when the device is not used for long periods of time
4. We do not recommend the sharing of earphones or breathing sensor belts with others
5. This product is not waterproof. Do not clean with any liquid cleaner. To clean the unit, use a soft dry cloth to clean the surface. Do not allow any liquid to enter the main unit. Do not use abrasive cleaners.
6. Do not use when close to a strong magnet, interference i.e. mobile phones or microwaves etc.
7. Do not change the earphones and breathing sensor belt supplied with this product with other non-approved devices

Explanation of symbols on unit

This symbol indicates that this product is a Type B device.

Symbol for "Environment Protection" – Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local Authority or retailer for recycling advice.

Symbol for "Manufacturer".

This product complies with MDD93/42/EEC requirements.

Symbol for "European Representative".

Warranty

This product is guaranteed for a period of one year from the date of purchase against mechanical and electrical manufacturing defects. There are no user serviceable parts inside the Lloydspharmacy Blood Pressure Lowering System. Any attempted repairs by unauthorised persons invalidates the warranty. This does not affect your statutory rights.

Harvard Medical Devices Ltd.
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Made in P.R.C.

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CE 0123

Other products to help you manage your heart health are available at Lloydspharmacy

Blood Pressure Monitor

Cholesterol Monitor

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